UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/642,599	08/19/2003	Michael Francis Dolan	29250-001066/US	2769

7590 03/31/2006	EXAMINER
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ART UNIT	PAPER NUMBER
2617	

DATE MAILED: 03/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	10/642,599	DOLAN ET AL.
	Examiner	Art Unit	
	Suhail Khan	2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>11 January 2006</u>.

2a)☐ This action is **FINAL**.   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-3,5,7-10,12,13 and 15-19* is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-3,5,7-10,12,13 and 15-19* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible

for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been

timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR

1.114. Applicant's submission filed on 1/11/2006 has been entered.

Claim Rejections - 35 USC § 103

2.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section
> 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the
> subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill
> in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the
> invention was made.

3.   Claims 1-3, 7-10 and 15-19 rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent App. Pub. No. 2002/0045443 to Hunzinger, in view of U.S. Patent App. Pub. No.

2004/0085894 to Wang et al.

Referring to **claim 1**, Hunzinger discloses a method comprising: activating a call

recovery timer to detect an error condition (page 5, paragraph 54, FRP timer is interpreted as

being the call recovery timer; dropped connection is interpreted as being the error condition); and

establishing a new communication channel if a current communication channel is judged to

potentially drop (page 5, paragraph 50, potential connection drop; add channels to rescue

connection in danger of dropping), wherein activating the call recovery timer includes

monitoring the current communication channel while establishing the new communication

channel (page 8, paragraph 84, monitor; continuously monitor existing or new candidates and promote them to the active set; also, page 5, paragraph 50, add channels to rescue connection). Hunzinger does not disclose resetting the call recovery timer if good frames are received on the current communication channel. The examiner maintains that the concept of resetting the call recovery timer if good frames are received on the current communication channel was well known in the art as taught by Wang et al.

In a similar field of endeavor, Wang et al show resetting a timer when a good frame is received (page 8, paragraph 81).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger to show a method comprising: activating a call recovery timer to detect an error condition; and establishing a new communication channel if a current communication channel is judged to potentially drop, wherein activating the call recovery timer includes monitoring the current communication channel while establishing the new communication channel, and resetting the call recovery timer if good frames are received on the current communication channel, as taught by Wang et al, the motivation being receiving a response within the allotted time (Wang et al, page 8, paragraph 84).

Referring to **claim 2**, Hunzinger discloses the method according to claim 1, wherein establishing a new communication channel includes detecting the presence of at least a plurality of bad frames on the current communication channel (page 6, paragraph 64, bad frames).

Referring to **claim 3**, Hunzinger discloses the method according to claim 2, wherein the cell recovery timer is activated once at least 12 bad frames are detected on the current communication channel (page 3, paragraph 26, 12 consecutive bad frames).

Referring to **claim 7**, Hunzinger discloses the method according to claim 1, wherein establishing the new communication channel includes searching for a pilot channel on an active carrier (page 2, paragraph 23, searches for a pilot).

Referring to **claim 8**, Hunzinger discloses the method according to claim 7, wherein establishing the new communication channel further includes decoding a sync channel and at least one of a broadcast common channel and a paging channel (page 2, paragraph 15, decode/ sync channel; page 1, paragraph 7, paging channels/ broadcast).

Referring to **claim 9**, Hunzinger discloses the method according to claim 8, further including using the new communication channel to continue a session on the current communication channel (page 9, paragraph 92, new channel).

Referring to **claim 10**, Hunzinger discloses a method, comprising: activating a cell recovery timer to detect the error condition (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer); monitoring the error condition on an active communication channel (page 3, paragraph 27, high frame error rates or bursty error rates; also, pages 4 and 5, paragraph 50, potential connection drop is interpreted as being an error condition); establishing a simultaneous communication channel (page 9, paragraph 92, new channel) while the call recovery timer is active (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer); and searching the simultaneous communications channel (page 4, paragraph 47, searching for the ACC in those pilots) while continuing to monitor the active communication channel (page 8, paragraph 84, monitor). Hunzinger does not disclose resetting the call recovery timer if good frames are received on the current communication channel. The examiner

maintains that the concept of resetting the call recovery timer if good frames are received on the current communication channel was well known in the art as taught by Wang et al.

In a similar field of endeavor, Wang et al show resetting a timer when a good frame is received (page 8, paragraph 81).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger to show a method, comprising: activating a cell recovery timer to detect the error condition; monitoring the error condition on an active communication channel; establishing a simultaneous communication channel while the call recovery timer is active; searching the simultaneous communications channel while continuing to monitor the active communication channel; and resetting the call recovery timer if good frames are received on the current communication channel, as taught by Wang et al, the motivation being receiving a response within the allotted time (Wang et al, page 8, paragraph 84).

Referring to **claim 15**, Hunzinger discloses the method according to claim 10, wherein the call recovery timer is transmitted from a wireless system base station (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer; page 5, paragraph 57, BS).

Referring to **claim 16**, Hunzinger discloses a method, comprising: supplying specific session information to a new channel to assist a call recovery process (page 5, paragraph 54, rescue attempt), the call recovery process initiated by a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer) in response to an error condition on an active channel (page 3, paragraph 27, high frame error rates or bursty error rates; also, pages 4 and 5, paragraph 50, potential connection drop is interpreted as being an error condition); and monitoring the active channel while establishing the new channel (page 8, paragraph 84,

monitor). Hunzinger does not disclose resetting the call recovery timer if good frames are received on the current communication channel. The examiner maintains that the concept of resetting the call recovery timer if good frames are received on the current communication channel was well known in the art as taught by Wang et al.

In a similar field of endeavor, Wang et al show resetting a timer when a good frame is received (page 8, paragraph 81).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger to show a method, comprising: supplying specific session information to a new channel to assist a call recovery process, the call recovery process initiated by a call recovery timer in response to an error condition on an active channel; monitoring the active channel while establishing the new channel; and resetting the call recovery timer if good frames are received on the current communication channel, as taught by Wang et al, the motivation being receiving a response within the allotted time (Wang et al, page 8, paragraph 84).

Referring to **claim 17**, Hunzinger discloses the method according to claim 16, further comprising receiving an origination message requesting voice communication with a user currently using the active channel (page 4, paragraph 50, voice).

Referring to **claim 18**, Hunzinger discloses the method according to claim 17, further comprising authorizing voice communication with the user (page 4, paragraph 50, voice).

Referring to **claim 19**, Hunzinger discloses the method according to claim 18, further comprising dropping the active channel (page 5, paragraph 54, connection is dropped).

4.   Claims 5 and 12-13 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S.

Patent App. Pub. No. 2002/0045443 to Hunzinger, in view of U.S. Patent App. Pub. No.

2004/0085894 to Wang et al and further in view of U.S. Patent App. Pub. No. 2002/0065080 to

Pittampalli et al.

Referring to **claim 5**, Hunzinger and Wang et al disclose the method according to claim 4

with a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call

recovery timer). Hunzinger and Wang et al do not disclose that the call recovery timer is less

than 5 seconds.

However, Pittampalli et al disclose waiting an additional DELTA milliseconds for the

call to recover (page 4, paragraph 31, it is inherent that this wait time value is less than 5

seconds).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the

invention to modify Hunzinger and Wang et al to show that the call recovery timer is less than 5

seconds, as taught by Pittampalli et al, the motivation being waiting before using a larger or

different set of base stations to serve the call (Pittampalli et al, page 4, paragraph 31).

Referring to **claim 12**, Hunzinger and Wang et al disclose the method according to claim

10, further comprising establishing an active communication session on the simultaneous

communication channel (page 5, paragraph 50, add BS pilot channels to the active set in order to

rescue) and a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call

recovery timer). Hunzinger and Wang et al do not disclose establishing an active session if the

call recovery timer elapses.

However, Pitampalli et al disclose waiting an additional DELTA milliseconds for the call to recover (page 4, paragraph 31).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger and Wang et al to show establishing an active communication session on the simultaneous communication channel if the call recovery timer elapses, as taught by Pittampalli et al, the motivation being waiting before using a larger or different set of base stations to serve the call (Pittampalli et al, page 4, paragraph 31).

Referring to **claim 13**, Hunzinger and Wang et al disclose the method according to claim 10 with a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer) and a fade timer expiring after 5 seconds (page 3, paragraph 26, fade timer). Hunzinger and Wang et al do not disclose that the call recovery timer is less than a fade timer.

However, Pittampalli et al disclose waiting an additional DELTA milliseconds for the call to recover (page 4, paragraph 31, it is inherent that this wait time value is less than 5 seconds; DELTA milliseconds < 5 seconds).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger and Wang et al to show that the call recovery timer is less than a fade timer, as taught by Pittampalli et al, the motivation being waiting before using a larger or different set of base stations to serve the call (Pittampalli et al, page 4, paragraph 31).

Response to Arguments

5.   Applicant's arguments filed 1/11/2006 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Suhail Khan whose telephone number is (571) 272-7910. The examiner can normally be reached on M-F from 8 am to 4:30 pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Feild, can be reached at (571) 272-4090.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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JOSEPH FEILD

SUPERVISORY PATENT EXAMINER